Locality		NPA	Apr 00	Dec 99		+/-	Notes
Hawaii		808	2006 2Q	2007 2Q	(1)	
Idaho		208	2003 1Q	2004 4Q	(1)	
Illinois		217	2003 2Q	2003 2Q	(0)	
Illinois		309	2010 1Q	2010 1Q	(0)	
Illinois		312	2002 2Q	2002 1Q	(0)	Pooling implemented 8/99
Illinois		618	2004 3Q	2003 1Q	(-1)	
Illinois		630	2000 4Q	2000 3Q	(0)	Pooling implemented 8/99
Illinois		708	2001 2Q	2001 1Q	(0)	Pooling implemented 4/00
Illinois		773	2002 3Q	2002 1Q	(0)	Pooling implemented 10/99
Illinois		815	2002 2Q	2003 2Q	(1)	
Illinois		847	2000 4Q	2000 3Q	(0)	Pooling implemented 6/98; Forecast for 847 only
Illinois		847/224	2016 2Q	2016 1Q	(0)	Pooling implemented 6/98
Indiana	R	219	2003 1Q	2001 4Q	(-2)	
Indiana		317	2002 4Q	2002 2Q	(0)	
Indiana		765	2004 2Q	2002 4Q	(-2)	
Indiana		812	2005 1Q	2003 3Q	(-2)	
lowa		319	2001 4Q	2002 3Q	(1)	
lowa		515	2005 2Q	2001 3Q	(-4)	Introduction of relief NPA
lowa		712	2010 2Q	2010 2Q	(0)	
Kansas		316	2001 3Q	2002 3Q	(1)	
Kansas		785	2006 2Q	2007 2Q	(1)	
Kansas		913	2008 3Q	2006 1Q	(-2)	
Kentucky		270	2004 2Q	2006 3Q	(2)	
Kentucky		502	2003 1Q	2004 1Q	(1)	
Kentucky		606	2003 4Q	2000 4Q	(-3)	Impact of new relief NPA
Kentucky		859	2005 4Q		(NA)	New NPA
Louisiana		225	2009 4Q	2010 1Q	(1)	
Louisiana		318	2004 4Q	2004 3Q	(0)	
Louisiana		337	2006 1Q	2006 2Q	(0)	
Louisiana	R	504	2002 1Q	2001 3Q	(-1)	
Maine		207	2002 3Q	2002 2Q	(0)	Pooling planned for 6/00
Maryland		240/301	2002 2Q	2002 1Q	(0)	NPA 301 is capped
Maryland		410/443	2001 2Q	2000 4Q	(-1)	NPA 410 is capped
Massachusetts		413	2002 1Q	2002 3Q	(0)	
Massachusetts	R	508	2000 2Q	2002 1Q	(2)	NPA exhausted
Massachusetts	R	617	2002 2Q	2001 2Q	(-1)	NPA is exhausted
Massachusetts	R	781	2001 3Q	2001 3Q	(0)	
Massachusetts	R	978	2001 4Q	2001 4Q	(0)	
Michigan		231	2005 3Q	2003 1Q	(-2)	
Michigan	R	248	2001 2Q	2001 4Q	(0)	
Michigan		313	2002 1Q	2001 3Q	(-1)	
Michigan	R	517	2001 3Q	2004 3Q	(3)	Relief suspended
Michigan	R	616	2001 4Q	2001 2Q	(0)	
Michigan		734	2001 2Q	2001 2Q	(0)	
Michigan	R	810	2001 2Q	2000 4Q	(-1)	Relief planning suspended
Michigan		906	2013 4Q	2013 4Q	(0)	
Minnesota		218	2009 2Q	2013 1Q	(4)	1.4X incr. in code growth rate

R = Relief date based upon rationing amount

NA = Not Applicable ** = Code data used for study as of 4/1/00

Locality		NPA	Apr 00	Dec 99			+/-	Notes
Minnesota		320	2023 40	2018	4Q	(-5)	Decrease in code growth rate
Minnesota		507	2008 10	2008	1Q	(0)	
Minnesota		612	2004 40	2009	1Q	(5)	1.8X incr. in code growth rate
Minnesota		651	2008 40	2008	4Q	(0)	
Minnesota		763	2005 10	i		(NA)	New NPA
Minnesota		952	2006 20			(NA)	New NPA
Mississippi		228	2015 40	2035	4Q	(20)	2.3X incr. in code growth rate
Mississippi		601	2003 10	2004	3Q	(1)	
Mississippi		662	2004 10	2008	1Q	(4)	2X incr. in code growth rate
Missouri	R	314	2001 20	2001	3Q	(0)	
Missouri		417	2005 1Q	2005	1Q	(0)	
Missouri		573	2005 4Q	2004	4Q	(-1)	
Missouri		636	2008 10	2004	3Q	(-4)	Decrease in growth code rate
Missouri		660	2020 1Q	2019	4Q	(-1)	
Missouri		816	2002 1Q	2001	4Q	(-1)	
Montana		406	2004 1Q	2004	1Q	(0)	
Nebraska		308	2032 1Q	2032	4Q	(0)	
Nebraska		402	2001 20	2000	4Q	(-1)	
Nevada		702	2006 2Q	2004	2Q	(-2)	Decrease in code growth rate
Nevada		775	2006 4Q	2003	1Q	(-3)	
New Hampshire	R	603	2001 4Q	2001	4Q	(0)	Pooling planned for 5/00
New Jersey	R	201	2002 1Q	2001	4Q	(-1)	
New Jersey		609	2001 40	2002	3Q	(1)	
New Jersey	R	732	2000 4Q	2001	1Q	(1)	
New Jersey		856	2002 30	2002	3Q	(0)	
New Jersey		908	2002 4Q	2003	1Q	(1)	
New Jersey	R	973	2001 10	2001	2Q	(0)	
New Mexico	R	505	2002 4Q	2002	3Q	(0)	
New York		212/646	2003 2G	2002	2Q	(-1)	NPA 212 is capped; pooling planned for 4/01 in NPA 212 and 8/01 for NPA 646
New York		315	2002 10	2001	1Q	(-1)	Pooling planned for 2/01
New York		347/718	2003 20	2002	3Q	(-1)	NPA 718 is capped, pooling planned for 4/01 in NPA 347 and 8/01 for NPA 718
New York		516	2001 3C			(0)	Pooling planned for 7/00
New York	R	518	2003 1C			(-1)	Pooling planned for 9/00
New York		607	2005 1C			(1)	Pooling planned for 6/01
New York		631	2002 1C	2004	2Q	(2)	Pooling planned for 6/01
New York	R	716	2002 2C	2001	4Q	(-1)	Pooling planned 4/00
New York		845	2009 2Q			(NA)	New NPA; pooling planned for 4/01
New York		914	2001 3C			(-1)	Impact of new relief code: Pooling planned for 4/01
New York		917	2001 2C	2002	1Q	(1)	NPA 917 is capped. Codes are assigned if they become available. Pooling planned for 8/01
North Carolina		252	2005 10	2007	3Q	(2)	0,0.
North Carolina		336	2002 40			ì	1)	

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NA = Not Applicable

** = Code data used for study as of 4/1/00

Locality		NPA	Apr 00	Dec 99			+/-	Notes
North Carolina		704/980	2008 2	Q 2001	3Q	(-7)	Impact of new relief NPA
North Carolina		828	2008 1	Q 2011	4Q	(3)	
North Carolina		910	2005 1	Q 2003	4Q	(-2)	
North Carolina		919	2001 4	Q 2002	2Q	(1)	
North Dakota		701	2005 4	Q 2006	4Q	(1)	
Ohio		216	2004 2	Q 2006	2Q	(2)	
Ohio		330/234	2009 3	Q 2001	2Q	(-8)	Introduction of relief NPA
Ohio		419	2002 1	Q 2001	3Q	(-1)	
Ohio		440	2004 2	Q 2003	3Q	(-1)	
Ohio		513	2001 3	Q 2001	3Q	(0)	
Ohio		614	2002 3	Q 2002	2Q	(0)	
Ohio		740	2006 4	Q 2004	4Q	(-2)	
Ohio		937	2003 4	Q 2004	4Q	(1)	
Oklahoma		405	2002 3	Q 2002	3Q	(0)	
Oklahoma		580	2006 4	Q 2006	4Q	(0)	
Oklahoma		918	2002 3	Q 2002	1Q	(0)	
Oregon		503A	2002 2	Q 2002	2Q	(0)	Coastal Counties only
Oregon		503/971	2006 3	Q 2007	2Q	(1)	
Oregon	R	541	2002 4	Q 2002	4Q	(0)	
Pennsylvania		215/267	2001 4	Q 2003	1Q	(2)	NPA 215 is capped
Pennsylvania	R	412	2002 3			(0)	
Pennsylvania	R	484/610	2002 3	Q 2001	4Q	(-1)	
Pennsylvania		570	2002 1			(0)	
Pennsylvania		717	2003 4		2Q	(-2)	
Pennsylvania		724	2001 4			(1)	
Pennsylvania		814	2006 2			(4)	1.7X incr. in code growth rate
Puerto Rico	R	787	2001 3			(3)	2.7X incr. in code growth rate
Rhode Island		401	2002 3		1Q	(-1)	
South Carolina		803	2003 2		1Q	(2)	
South Carolina		843	2003 2		1Q	(0)	
South Carolina		864	2005 3			(0)	
South Dakota		605	2005 4			(2)	
Tennessee		423	2004 2			(0)	
Tennessee		615	2002 2			(0)	
Tennessee	_	865	2006 2			(-1) 1)	
Tennessee	R	901	2001 4			(-1)	
Tennessee		931	2009 2			(-1) -1)	
Texas		210	2005 2			(-1)	
Texas		214/469/ 972	2002 1	Q 2001	40	(-1)	
Texas		254	2017 2	Q 2017	1Q	(0)	
Texas		281/713/	2002 3			(0)	
TOAGO		832						
Texas		361	2006 4			(0)	
Texas		409	2005 3			(2)	
Texas	R	512	2003 4			(1)	Pooling planned for 7/00
Texas		806	2013 1			(3)	
Texas	R	817	2000 3	Q 2000	4Q	(0)	

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Locality		NPA	Apr 00	Dec 99			+/-	Notes
Texas		830	2007 1Q	2008	3Q	(1)	
Texas		903	2002 4Q	2002	2Q	(0)	
Texas		915	2002 4Q	2003	1Q	(1)	
Texas		936	2005 4Q			(NA)	New NPA
Texas		940	2007 3Q	2012	1Q	(5)	1.7X incr. in code growth rate
Texas		956	2007 1Q	2007	1Q	(0)	
Texas		979	2005 4Q			(NA)	New NPA
US Virgin Islands		340	2148 4Q			(NA)	
Utah		435	2012 4Q	2017	1Q	(5)	1.4X increase in code growth rate
Utah	R	801	2001 1Q	2001	1Q	(0)	
Vermont		802	2007 1Q	2011	1Q	(4)	Spike caused by single request for 98 codes
Virginia	R	540	2002 3Q	2002	1Q	(0)	
Virginia		571/703	2006 1Q	2005	4Q	(-1)	
Virginia		757	2002 2Q		1Q	(0)	
Virginia	R	804	2002 2Q	2001	3Q	(-1)	
Washington		206	2003 1Q	2002	2Q	(-1)	
Washington		253	2004 1Q	2004	1Q	(0)	
Washington	R	360	2010 2Q	2000	4Q	(-10)	Introduction of relief NPA
Washington		425	2002 2Q	2002	3Q	(0)	
Washington		509	2001 3Q	2002	2Q	(1)	
Washington D.C.		202	2004 3Q	2004	2Q	(0)	
West Virginia		304	2002 1Q	2004	3Q	(2)	
Wisconsin		262	2002 4Q	2005	2Q	(3)	
Wisconsin		414	2006 2Q	2006	1Q	(0)	
Wisconsin		608	2005 4Q	2009	2Q	(4)	1.7X incr. in code growth rate
Wisconsin		715	2004 3Q	2004	4Q	(0)	
Wisconsin		920	2004 4Q		1Q	(0)	
Wyoming		307	2012 3Q	2012	3Q	(0)	

R = Relief date based upon rationing amount
NA = Not Applicable
** - Code data used for study as of 4/1/00

EXHIBIT C

LECs as well as new LEC entrants, and also apply to cellular, broadband PCS, and covered SMR providers. According to the SBA definition, incumbent LECs do not qualify as small businesses because they are dominant in their field of operation. Accordingly, we will not address the impact of these rules on incumbent LECs.

- 15. However, our rules may have a significant economic impact on a substantial number of small businesses insofar as they apply to telecommunications carriers other than incumbent LECs. The rules may have such an impact upon new entrant LECs as well as cellular, broadband PCS, and covered SMR providers. Based upon data contained in the most recent census and a report by the Commission's Com Carrier Bureau, we estimate that 2,100 carriers could be affected. See supra [] 4 (discussion of estimated number of small businesses affected). We request comment this estimate. These entities could include various categories of carriers, inclu competitive access providers, cellular carriers, interexchange carriers, mobile se carriers, operator service providers, pay telephone operators, PCS providers, cove providers, and resellers. The SIC codes which describe these groups are 4812 and
- 16. Reporting, Recordkeeping and Other Compliance Requirements: The Further Notice requests comment on the appropriate method by which the costs of lo term number portability should be recovered. One possible cost recovery method wo be based upon a percentage of a carrier's gross revenues. Such a rule, if promulg would not impose a reporting requirement on LECs because they already file informa about gross revenues with the Commission for other purposes. There are no other reporting requirements contemplated by the Further Notice.
- 17. Federal Rules Which Overlap, Duplicate or Conflict with these Rules: None.

APPENDIX D - 100 LARGEST METROPOLITAN STATISTICAL AREAS (MSAs) AND THEIR POPULATIONS

```
1. Los Angeles, CA
                              9,150,000
                           8,584,000
2. New York, NY
                           7,668,000
3. Chicago, IL
4. Philadelphia, PA 4,949,000
5. Washington, DC
                              4,474,000
6. Detroit, MI 4,307,000
7. Houston, TX 3,653,000
8. Atlanta, GA 3,331,000
9. Boston, MA* 3,211,000
10. Riverside, CA 2,907,000
11. Dallas, TX 2,898,000
12. Minneapolis, MN 2,688,000
13. Nassau, NY 2,651,000
                           2,621,000
14. San Diego, CA
15. Orange Co., CA
                              2,543,000
                             2,536,000
16. St. Louis, MO
17. Phoenix, AZ
                          2,473,000
                           2,458,000
18. Baltimore, MD
     Pittsburgh, PA
                               2,402,000
19.
20.
     Akron, OH 2,222,000
                        2,182,000
2,180,000
21.
     Oakland, CA
     Seattle, WA 2,180,000
Tampa, FL 2,157,000
Miami, FL 2,025,000
Newark, NJ 1,934,000
Denver, CO 1,796,000
Portland, OR 1,676,000
22.
23.
24.
25.
26.
28. Kansas City, KS 1,647 (29. San Francis
28. Kansas City, KS 1,647,000
29. San Francisco, CA 1,646,00
30. Cincinnati, OH 1,581,000
31. San Jose, CA 1,557,000
                                  1,646,000
31. San Jose, CA 1,557,000
32. Norfolk, VA 1,529,000
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1,464,000
33. Fort Worth, TX
     Indianapolis, IN
                          1,462,000
34.
35. Milwaukee, WI
                        1,456,000
                        1,441,000
36. Sacramento, CA
37. San Antonio, TX
                         1,437,000
38. Columbus, OH
                       1,423,000
39. Fort Lauderdale, FL
                              1,383,000
                      1,361,000
40. Orlando, FL
                          1,309,000
41. New Orleans, LA
42. Bergen, NJ
                     1,304,000
                      1,260,000
43. Charlotte, NC
44. Buffalo, NY
                      1,189,000
45. Salt Lake City, UT
                             1,178,000
                        1,156,000
46. Hartford, CT*
                         1,131,000
47. Providence, RI*
48. Greensboro, NC
                         1,107,000
49. Rochester, NY
                        1,090,000
50. Las Vegas, NV
                        1,076,000
⊕51. Nashville, TN
                        1,070,000
                        1,069,000
52. Middlesex, NJ
53. Memphis, TN
                      1,056,000
                       1,035,000
54. Monmouth, NJ
55. Oklahoma City, OK
                            1,007,000
56. Grand Rapids, MI
                              985,000
                            981,000
57. Louisville, KY
                              972,000
58. Jacksonville, FL
                         965,000
59. Raleigh, NC
                        964,000
60. Austin, TX
61. Dayton, OH
                        956,000
                                 955,000
62.
     West Palm Beach, FL
                          917,000
63. Richmond, VA
                        875,000
64. Albany, NY
                          874,000
65. Honolulu, HI
                            872,000
66. Birmingham, AL
                            837,000
67. Greenville, SC
                        835,000
68. Fresno, CA
                          754,000
69. Syracuse, NY
                       743,000
70. Tulsa, OK
                        732,000
71.
     Tucson, AZ
                         703,000
72. Ventura, CA
                           677,000
73. Cleveland, OH
                         665,000
74. El Paso, TX
                       663,000
75. Omaha, NE
                             646,000
76. Albuquerque, NM
77. Tacoma, WA
                        638,000
                          637,000
78. Scranton, PA
                           631,000
79. Knoxville, TN
                      620,000
80. Gary, IN
                        614,000
81. Toledo, OH
                           612,000
82. Allentown, PA
                            610,000
83. Harrisburg, PA
                             609,000
84. Bakersfield, CA
                            604,000
85. Youngstown, OH
86. Springfield, MA*
                              584,000
                             558,000
87. Baton Rouge, LA
                             552,000
88. Jersey City, NJ
                            539,000
89. Wilmington, DE
                             538,000
90. Little Rock, AR
91. New Haven, CT*
                            527,000
                            522,000
92. Charleston, SC
93. Sarasota, FL
                          518,000
                          518,000
94. Stockton, CA
     Ann Arbor, MI
                           515,000
95.
96. Mobile, AL
                        512,000
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97. Wichita, KS 507,000 98. Columbia, SC 486,000 99. Vallejo, CA 483,000 100. Fort Wayne, IN 469,000□□

* Population figures for New England's city and town based MSAs are for 1992, whil others are for 1994.

APPENDIX E - DESCRIPTION OF NUMBER PORTABILITY METHODS

1. Database methods

- Location Routing Number (LRN). Under AT&T's LRN proposal, a carrier seeking to route a call to a ported number queries or "dips" an external routing d obtains a ten-digit location routing number for the ported number, and uses that 1 routing number to route the call to the end office switch which serves the called The carrier dipping the database may be the originating carrier, the terminating c the N-1 carrier (the carrier prior to the terminating carrier). Under the LRN met unique location routing number is assigned to each switch. For example, a local s provider receiving a 7-digit local call, such as 887-1234, would examine the diale number to determine if the NPA-NXX is a portable code. If so, the 7 digit dialed number would be prefixed with the NPA and a 10-digit query (e.g., 679-887-1234) wo be launched to the routing database. The routing database then would return the L (e.g., 679-267-0000) associated with the dialed number which the local service pro uses to route the call to the appropriate switch. The local service provider then formulate an SS7 call set up message with a generic address parameter, along with forward call indicator set to indicate that the query has been performed, and rout to the local service provider's tandem for forwarding.
- 2. LRN is a "single-number solution" because only one number (i.e., the number dialed by the calling party) is used to identify the customer in the servin Each switch has one network address -- the location routing number. The record an Industry Numbering Committee (INC) indicate that LRN supports custom local area signalling services (CLASS), emergency services, and operator and directory servic may result in some additional post-dial delay. LRN can support location and servi well as service provider portability. Finally, LRN supports wireless-wireline and wireless-wireless service provider portability.
- Carrier Portability Code (CPC). Under CPC, each local service provider within a given area would be assigned a three-digit Carrier Portability Code (CPC) database serving that area would contain all the telephone numbers that have been transferred from one carrier to another and their corresponding CPCs. A carrier q the database for purposes of routing a call to a customer that has transferred his telephone number would know from the NXX code of the dialed number that the telephone number may have been transferred to another local service provider. The carrier would query a database serving that area, which would return to the carrie digit CPC corresponding to the service provider serving the dialed number. then would route the call according to the carrier portability code and the dialed code. For example, an IXC delivering a call to the 301 NPA would query the databa serving the 301 area code. In return, that database would transmit back to the IX digit number consisting of the three-digit NPA replaced with the CPC for the LEC s that customer, plus the customer's seven-digit telephone number. The IXC then wou route the call to the location pre-designated by the terminating carrier based on digit CPC-NXX. Similarly, carriers providing service within the area would query same database to identify the local service provider responsible for handling spec calls.
- 4. AT&T asserts that CPC is compatible with LRN by permitting adoption of switch trigger mechanisms, switch interfaces, signalling translations, and the dev of an SMS to an LRN environment. CPC supports an N-1 call processing scenario, avoids routing calls through incumbent LEC networks, permits carriers to own or pr for their own routing databases, and supports vertical features. On the other han CPC method essentially uses two NPA codes, and therefore precludes use of the seco